

OK to
Enter
fd
7/21/07

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) A glycopeptide of the formula $A_1-A_2-A_3-A_4-A_5-A_6-A_7$, [SEQ ID NO:1] wherein the groups A_1 to A_7 comprise the heptapeptide structure of naturally occurring vancomycin;

and wherein the group A_4 is linked via a glycosidic bond to a disaccharide having a glucose residue directly attached to said A_4 residue, wherein said glucose residue bears an N-substituted aminohexose residue and at least one substituent of the formula YXR, attached to the C-6 position of said glucose;

wherein the group Y is a single bond, O, NR_1 or S; the group X is O, NR_1 , S, SO_2 , $C(O)O$, $C(O)S$, $C(S)O$, $C(S)S$, $C(NR_1)O$, $C(O)NR_1$, or halo (in which case Y and R are absent); and R and R_1 are independently hydrogen, alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclic, heterocyclic-carbonyl, heterocyclic-alkyl, heterocyclic-alkyl-carbonyl, alkylsulfonyl or arylsulfonyl; and any pharmaceutically acceptable salts thereof; provided that at least one of the said substituent of the formula YXR is not hydroxyl; X and Y are not both O; X and Y are not S and O, or O and S, respectively; and if two or more of said substituents are present, they can be the same or different.

Claims 2-4 (Cancelled).

5. (Previously Presented) The glycopeptide of claim 1 in which at least one of said substituent is YXR wherein Y is a single bond and X is O, NR_1 , S or SO_2 .

6. (Original) The glycopeptide of claim 5 wherein X is NR_1 .

Claims 7-25 (Cancelled).

26. (Previously Presented) The glycopeptide of claim 5 in which the N-substituted aminohexose residue bears at least one of said substituent.

27. (Previously Presented) The glycopeptide of claim 6 in which the N-substituted aminohexose residue bears at least one of said substituent.

Claims 28-101 (Cancelled)

102. (Currently Amended) A vancomycin glycopeptide antibiotic bearing at least one disaccharide group, said disaccharide group comprising two saccharide groups, a first of said saccharide groups bearing at least one amino group, and a second of said saccharide groups linked directly to said glycopeptide bears at least one substituent of the formula YXR, at the C-6 position of said saccharide, in which the group Y is a single bond, O, NR₁ or S; the group X is O, NR₁, S, SO₂, C(O)O, C(O)S, C(S)O, C(S)S, C(NR₁)O, C(O)NR₁, or halo (in which case Y and R are absent); and R and R₁ are independently hydrogen, alkyl, aryl, aralkyl, alkanoyl, aroyl, aralkanoyl, heterocyclic, heterocyclic-carbonyl, heterocyclic-alkyl, heterocyclic-alkyl-carbonyl, alkylsulfonyl or arylsulfonyl, provided that ~~the~~ said substituent of the formula YXR is not hydroxyl; X and Y are not both O; X and Y are not S and O, or O and S, respectively; and if two or more of said substituents of the formula YXR are present, they can be the same or different, or a pharmaceutically acceptable salt thereof.

103. (Previously Presented) The vancomycin glycopeptide antibiotic of claim 102 wherein the second of said saccharide groups is glucose modified to bear at least one substituent which is not hydroxyl at the C6 position of said glucose.

104. (Canceled)

DOCKET NO.: PUAM-0257
Application No.: 10/631,883
Office Action Dated: April 9, 2007

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 C.F.R. § 1.116

105. (Previously Presented) The vancomycin glycopeptide antibiotic of claim 103 wherein said at least one substituent which is not hydroxyl at the C6 position of said glucose is amino.

106. (Previously Presented) The vancomycin glycopeptide antibiotic of claim 105 wherein the first of said saccharide groups bears at least one substituted amino group.

107. (Previously Presented) The vancomycin glycopeptide antibiotic of claim 106 wherein said amino group is NR_1H wherein R_1 bears one or more alkyl, substituted alkyl, aryl, substituted aryl, heterocyclic or substituted heterocyclic groups.

Claims 108-115. (Cancelled)

116. (Previously Presented) The vancomycin glycopeptide antibiotic of claim 112 wherein said at least one substituent which is not hydroxyl is amino.

117. (Cancelled)